

WHAT IS CLAIMED IS:

1. A method for providing a user of a telephone with direct access to web audio content over a network, comprising:

- (A) dialing a media server;
- (B) accepting a call at the media server based on said dialing step (A);
- (C) prompting the user for web content identifier information; and
- (D) establishing an internal connection between a network interface controller and an audio source, whereby the audio source can deliver the web audio content corresponding to the web content identifier information to the telephone in the accepted call.

2. The method of claim 1, further comprising:

- (E) initiating a file transfer of the web audio content from a remote web server identified in the web content identifier information to the audio source.

3. The method of claim 2, further comprising:

- (F) buffering audio payloads containing audio data from the file transferred from the remote web server.

4. The method of claim 3, further comprising:

- (G) delivering the buffered audio data in an audio stream to the telephone.

5. The method of claim 2, wherein said initiating step (E) comprises:  
receiving RTP packets from the remote web server at a network interface controller;

converting the received RTP packets to internal packets having an audio payload and control header, the control header including an address to a link

between the network interface controller and the audio source through a cell switch; and

sending the internal packets on the link through the cell switch to the audio source.

6. The method of claim 5, wherein the cell switch switches ATM cells, the link comprises a switched virtual circuit (SVC), and the address comprises a VPI/VCI that identifies a switch virtual path and switch virtual channel, and wherein said sending internal packet step includes converting the internal packets to one or more ATM cells and sending the ATM cells to the cell switch.

7. The method of claim 5, further comprising:

storing internal packets at the audio source, the internal packets including audio payloads from the sent internal packets received at the audio source and a control header having the address of a link between the audio source through the cell switch to a network interface controller coupled to the telephone.

8. The method of claim 7, further comprising

sending the stored internal packets from the audio source through the cell switch to the network interface controller coupled to the telephone;

converting the sent internal packets at the network interface controller to RTP packets; and

forwarding the RTP packets to the telephone for play by the user.

9. The method of claim 5, wherein the cell switch switches ATM cells, the link comprises a switched virtual circuit (SVC), and the address comprises a VPI/VCI that identifies a switch virtual path and switch virtual channel, and wherein said sending the stored internal packet step includes converting the stored internal packets to one or more ATM cells and sending the ATM cells to the cell switch.

10. A method for providing a user of a telephone with direct access to web audio content over a network, comprising:

establishing a first audio channel through a switch between a network interface controller and an audio source in a connection phase coupling a media server and a telephone; and

establishing a second audio channel through a switch between the audio source and a network interface controller in an audio transport phase that transports web audio content directly from a remote web server to the audio source on the second audio channel and then from the audio source to the user of the telephone on the first audio channel.

11. The method of claim 10, further comprising processing an audio stream in the web audio content transported in the audio transport phase prior to transporting the audio stream from the audio source to the user of the telephone.

12. The method of claim 11, wherein said processing includes at least one of the following steps: inserting additional audio into the audio stream, converting the audio stream from one format to another format, mixing audio into the audio stream, filtering the audio stream, enhancing audio in the audio stream, and modifying audio in the audio stream.

13. A system for providing a user of a telephone with direct access to web audio content over a network, comprising:

(A) means for dialing a media server;

(B) means for accepting a call at the media server initiated by said dialing means (A);

(C) means for prompting the user for web content identifier information; and

(D) means for establishing an internal connection between a network interface controller and an audio source, whereby the audio source can

deliver the web audio content corresponding to the web content identifier information to the telephone in the accepted call.

14. The system of claim 13, further comprising:

(E) means for initiating a file transfer of the web audio content from a remote web server identified in the web content identifier information to the audio source.

15. The system of claim 14, further comprising:

(F) means for buffering audio payloads containing audio data from the file transferred from the remote web server.

16. The system of claim 15, further comprising:

(G) means for delivering the buffered audio data in an audio stream to the telephone.

17. A system for providing a user of a telephone with direct access to web audio content over a network, comprising:

means for establishing a first audio channel through a switch between a network interface controller and an audio source in a connection phase coupling a media server and a telephone; and

means for establishing a second audio channel through a switch between the audio source and a network interface controller in an audio transport phase that transports web audio content directly from a remote web server to the audio source on the second audio channel and then from the audio source to the user of the telephone on the first audio channel.

18. A direct access system, comprising:

a direct access controller;

a network interface controller;

an audio source; and

a switch;

wherein said switch is coupled between said network interface controller and said audio source, and

wherein said direct access controller establishes a first audio channel through said switch between said network interface controller and said audio source in a connection phase coupling a media server and a telephone, and establishes a second audio channel through said switch between said audio source and said network interface controller in an audio transport phase that transports web audio content directly from a remote web server to the audio source on the second audio channel and then from the audio source to the user of the telephone on the first audio channel.

19. A direct access system, comprising:

a direct access controller;

a network interface controller;

a video stream processor; and

a switch;

wherein said switch is coupled between said network interface controller and said video stream processor; and

wherein said direct access controller establishes a first channel through said switch between said network interface controller and said video stream processor in a connection phase coupling a media server and a telephone, and establishes a second channel through said switch between said video stream processor and said network interface controller in a video transport phase that transports web video content directly from a remote web server to the video stream processor on the second channel and then from the video stream processor to the user of the telephone on the first channel.

20. A method for providing a user of a telephone with direct access to web video content over a network, comprising:

establishing a first channel through a switch between a network interface controller and a video stream processor in a connection phase; and

establishing a second channel through a switch between the video stream processor and a network interface controller in an video transport phase that transports web video content directly from a remote web server to the video stream processor on the second channel and then from the video stream processor to the user of the telephone on the first channel.

21. The method of claim 20, further comprising processing a video stream in the web video content transported in the audio transport phase prior to transporting the video stream from the video stream processor to the user of the telephone.

22. The method of claim 21, wherein said processing includes at least one of the following steps: inserting additional video into the video stream, converting the video stream from one format to another format, enhancing video in the video stream, and modifying video in the video stream.